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Methods for Generating and Screening Novel Metabolic Pathways

This application is a division of U.S. Patent Application Serial No. 08/738,944 filed November 24, 1996 (now U.S. Patent No. 5,783,431) which is a continuation-in-part of U.S. Patent Application Serial No. 08/639,255 filed April 24, 1996 (now U.S. Patent No. 5,824,485) which is a continuation-in-part of U.S. Patent Application Nos. 08/427,244 and 08/427,348 both filed on April 24, 1995, the entire contents of each of which is incorporated herein by reference in its entirety.

1. FIELD OF THE INVENTION

The present invention relates to a novel approach to drug discovery. More particularly, the invention relates to a system for preserving the genomes of organisms that are good or promising sources of drugs; for randomly combining genetic materials from one or more species of organisms to generate novel metabolic pathways; and for pre-screening or screening such genetically engineered cells for the generation of novel biochemical pathways and the production of novel classes of compounds. The novel or reconstituted metabolic pathways can have utility in commercial production of the compounds.

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IN THE CLAIMS:

Please cancel Claims 60, 65, and 70, without prejudice.

REMARKS

Claims 27- 34, 36-41, 43-46, 48-59, 61-64, and 66-69 are presently pending. Claims 60, 65, and 70 have been canceled without prejudice. Applicants reserve